

Completion of cytokinesis in *C. elegans* requires a brefeldin A-sensitive membrane accumulation at the cleavage furrow apex

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Movie 1

Isolated P₁ Blastomere (untreated) in culture media. A Nomarski time lapse movie of a P₁ blastomere dividing in culture is shown. Notice that the blastomeres divide all in the same plane and are asymmetric.

Movie 2

Isolated P₁ Blastomere in BFA in culture media. A Nomarski time lapse movie of a P₁ blastomere dividing in culture is shown. Notice that the EMS blastomere (larger cell) does not divide in the right orientation and ultimately fails in cytokinesis. The P₂ blastomere divides in the right orientation but fails in cytokinesis. Note that the blastomeres continue to divide to apparent completion even after multiple failed divisions.

Movie 3

Untreated blastomere labeled with tubulin::GFP. Microtubule dynamics in isolated blastomeres are shown in metaphase through cytokinesis.

Movie 4

BFA-treated blastomere labeled with tubulin::GFP. Microtubule dynamics in BFA-treated blastomeres are similar to those in untreated blastomeres.

Movie 5

Internal membrane dynamics in early embryos labeled with Bodipy BFA. A multiphoton movie of a 1-cell embryo labeled with Bodipy BFA is shown.

Movie 6

Plasma membrane dynamics in the early embryo. A multiphoton movie a 1-cell embryo labeled with FM1-43 is shown.

Movie 7

Stereo-4D movie of membrane dynamics in the embryo. The multiphoton time course of a 4-cell embryo labeled with FM1-43 is shown. Observe the larger blastomeres (ABa and ABp) located on the top right as they divide.

Movie 8

Stereo-4D movie of the terminal phase of cytokinesis in a developing blastomere. The movie shows a close-up view of cytokinesis in one blastomere of a 4-cell embryo in stereo-4D.

Movie 9

Membrane dynamics in an isolated blastomere treated with BFA. Multiphoton time course of an isolated P₀ blastomere labeled with FM1-43 in the presence of BFA.